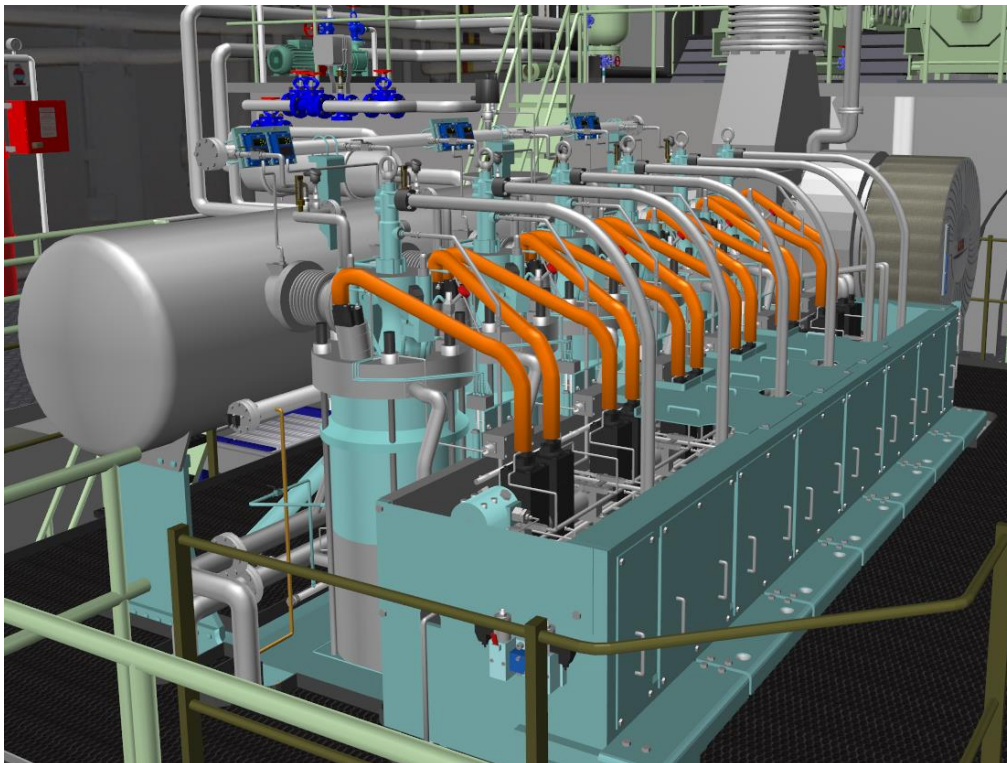


W-Xpert: Low Speed Electronically Controlled Engine Room Simulator

W-Xpert models typical medium-sized, computer-controlled engine rooms consisting of a two-stroke electronically controlled main engine, with fixed and controllable pitch propeller & three diesel generators.



W-Xpert has been developed to comply with:

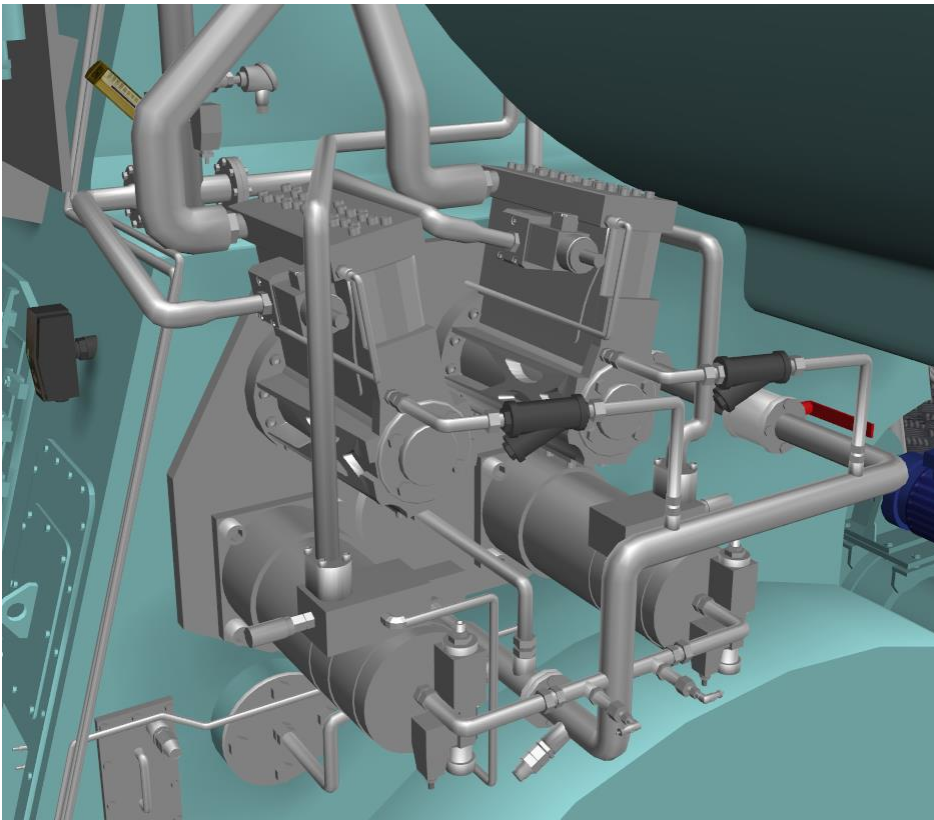
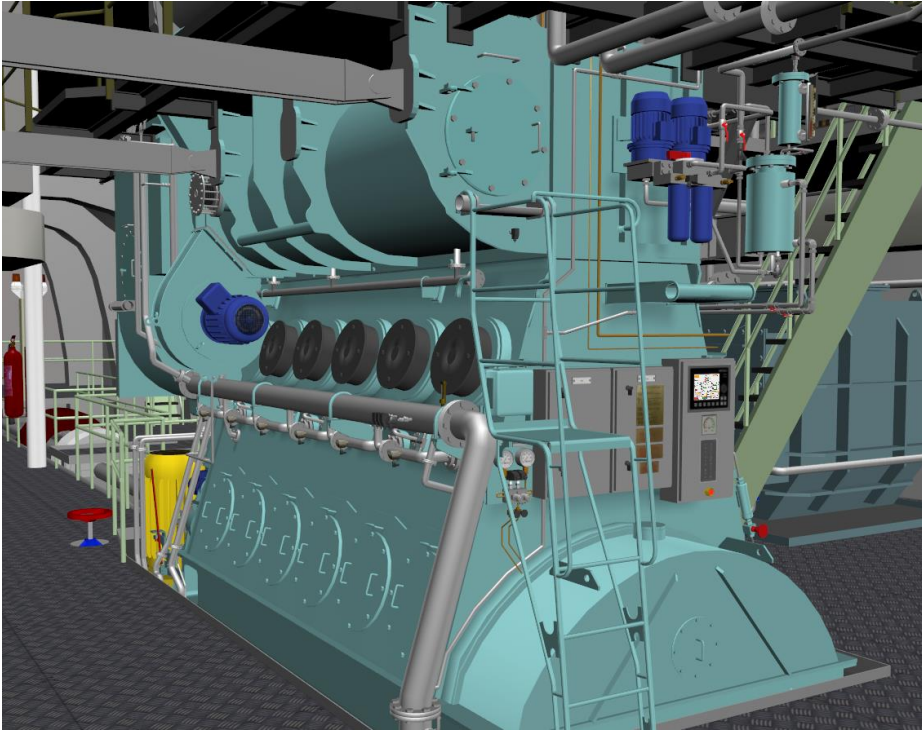
- STCW Code: Section A-1/12 and Section B-1/12.
- ISM Code: Section 6 and Section 8.

The main educational tasks which can be accomplished using W-Xpert:

- Learning typical ship's engine room operating routines.
- Learning to operate a ship's engine room. The user can carry out any operational task starting from different set-ups, both pre-prepared and saved by a user.
- Learning how to take corrective action when faults occur. Different faults can be simulated and mixed during the simulator run-time or loaded from disk.

W-Xpert simulates a Wartsila X35/40 type engine room in high quality 3D graphics with surround sound which can be heard on two, four or more speakers, giving a very realistic training environment.

W-Xpert Low speed Simulator



W-Xpert Low speed Simulator

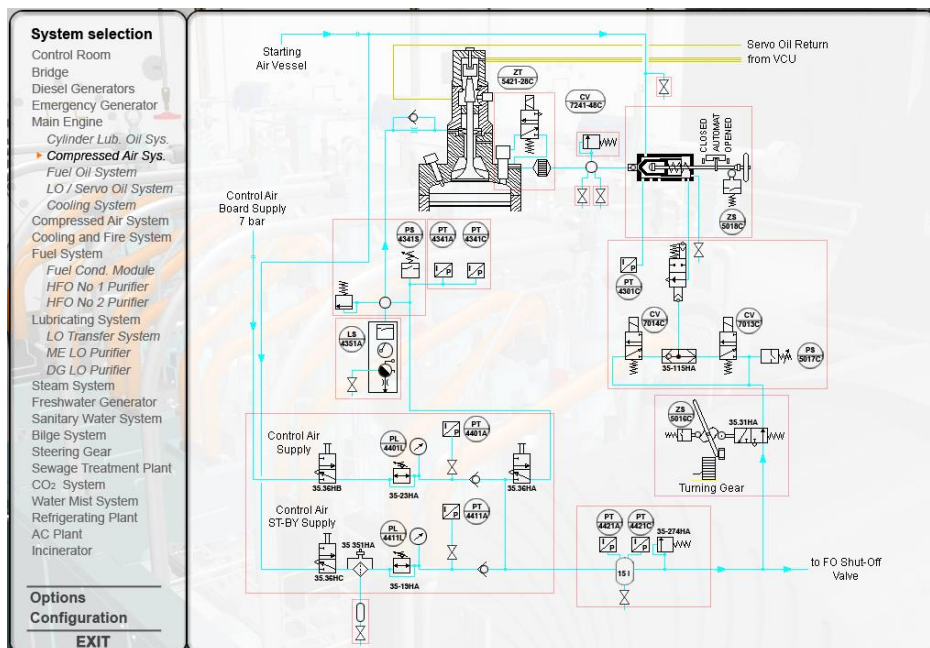


The simulated control room enables remote control of engine room equipment and control panels model the most important elements.





W-Xpert is modelled on a Wartsila X35/40 type engine.

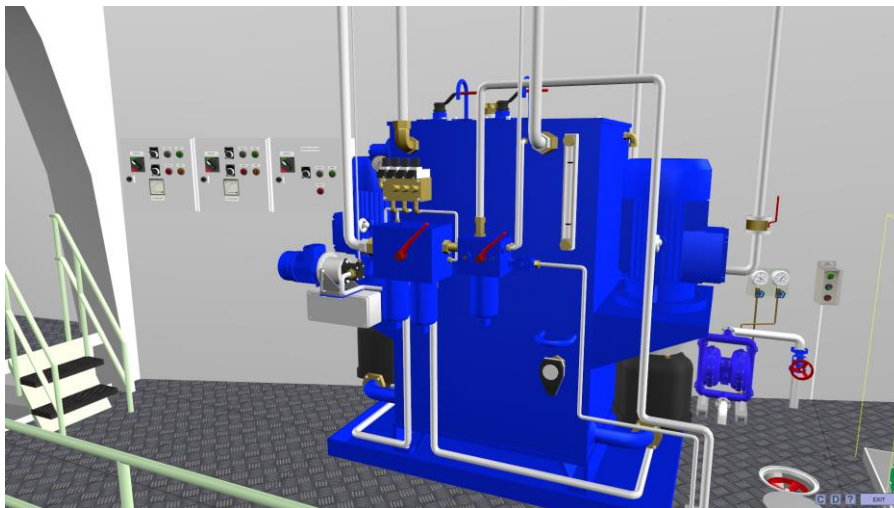


Mimic diagrams allow zooming in to any part of the engine room.

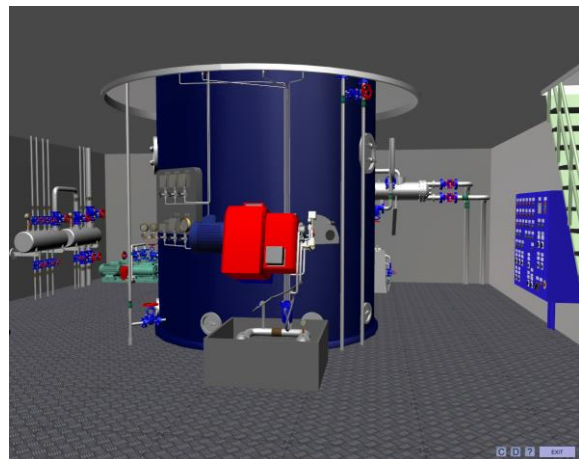
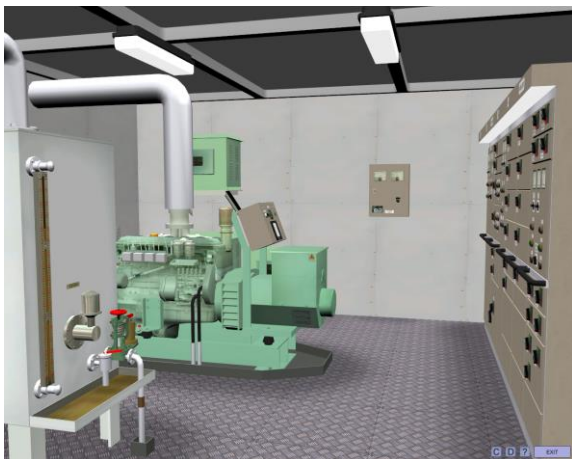
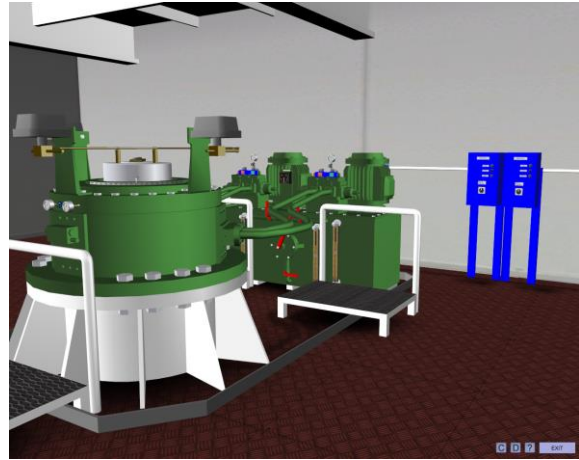
W-Xpert Low speed Simulator



The electric power plant is equipped with a modern Power Management System giving automatic control of generators according to actual power demand.



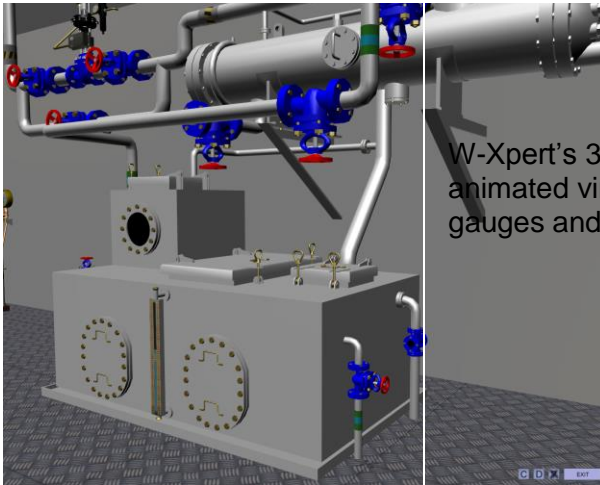
W-Xpert Low speed Simulator



W-Xpert models the following systems:

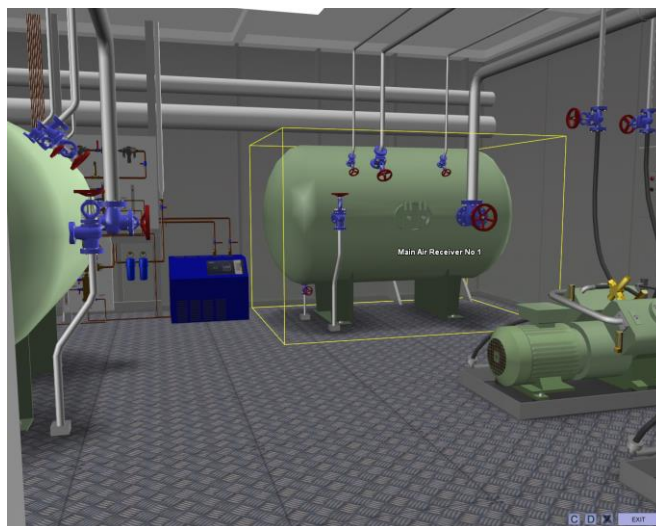
- Fuel System
- Cooling & Fire System
- Lubricating System
- Compressed Air System
- Power Plant
- Emergency Generator
- Steam System
- Sanitary Water System
- Bilge System
- Steering Gear
- Sewage Treatment Plant
- Refrigerating System
- Sanitary Water System
- Fresh Water Generator
- Air Conditioning Plant
- Water Mist System
- CO2 System
- Incinerator

W-Xpert Low speed Simulator



W-Xpert's 3D model includes very realistic, animated virtual controls such as switches, gauges and lamps.

The Zoom technique allows fast navigation in the 3D environment and easy access to details.



Here is a list of W-Xpert main features:

- W-Xpert is a highly realistic simulator for ship's engine room training which can also be used as a low cost introductory simulator.
- The mathematical model simulates a typical ship's engine room with one 2-stroke, low speed engines, reduction gear and controllable pitch propeller.
- All vital auxiliary systems have been implemented.
- The user interface includes virtual controls and alarms and creates very realistic environment.
- The 3D virtual reality with active valves, tank level indicators and selected digital gauges enable comfortable engine room operation and monitoring.
- Multichannel digitised sound provides a very realistic ships' engine room feel. Sound effects include: engine sound correlated with engine speed, diesel generator starting and running, open indicator valve sound, alarm and machine telegraph buzzers.
- Emergency procedure training including fire simulations

W-Xpert Low speed Simulator

